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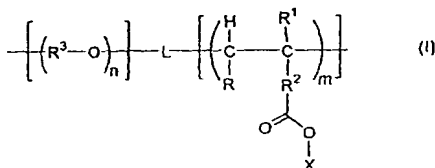
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(54) Title: BLOCK COPOLYMERS

$$-\left[\left(R^3\!-\!O\right)_n\right]\!-\!L\!-\!\left[\left(\!\!\begin{array}{cc} H & R^1 \\ C & C \\ R & R^2 \end{array}\!\!\right)_m\right] \qquad (I)$$

(57) Abstract: Novel block copolymers are described, together with the production therefrom of physiologically soluble polymer therapeutics. The block copolymers have the general formula (1) wherein R is selected from the group consisting of hydrogen, C_1-C_{18} alkyl, C_2-C_{18} akenyl, C_7-C_{18} aralkyl, C_7-C_{18} alkaryl, C_6-C_{18} aryl, carboxylic acid, C_2-C_{18} alkoxycarbonyl, C^2-C_{18} alkaminocarbonyl, or any one of C_1-C_{18} alkyl, C_2-C_{18} alkenyl, C_7-C_{18} aralkyl, C_7-C_{18} alkaryl, C_6-C_{18} aryl, C_2-C_{18} alkoxycarbonyl and C_2-C_{18} alkaminocarbonyl substituted with a heteroatom within, or attached to, the carbon backbone; R^1 is selected from the group consisting of hydrogen and C_1-C_6 alkyl groups; R^2 is a linking group; X is an electron withdrawing group; R^3 is selected from the group consisting of C_1-C_{18} alkylene, C_2-C_{18} alkenylene, C_7-C_{18} aralkylene, C_7-C_{18} alarylene and C_6-C_{18} arylene; L is a divalent linker joining the blocks; and m and n are each an integer of greater than 1.